Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	**)**
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COMMENTS OF ENCINA COMMUNICATIONS CORPORATION

I. INTRODUCTION

Encina Communications Corporation ("ECC") applauds Chairman Carr's leadership in initiating this proceeding to promote American economic competitiveness, encourage ongoing technological innovations and advancements, and protect our national security. This proceeding presents an opportunity to remove regulatory barriers that pose ongoing challenges to the wireless industry as it continues to grapple with increasing consumer demands on the finite national resource of spectrum. ECC appreciates the Chairman's bold leadership and "can do" attitude, evidenced by this public notice, and appreciates the opportunity to provide public comment as to how best to tackle such challenges.

II. HISTORICAL BACKGROUND

During his first term, President Trump highlighted the need for a national spectrum policy in an Executive Order on October 25, 2018.[1] The goal at that time was to ensure that the United States would not be left behind in the looming spectrum race and that there would be enough spectrum available to accommodate the ongoing technological advances of the wireless industry and resulting consumer demands.

Then, following President Trump's lead and evidencing the fact that a sustainable national spectrum policy is a bipartisan imperative, the FCC voted unanimously to adopt an order opening the 6 GHz band to unlicensed use paving the way for next-generation Wi-Fi networks.[2] In implementing this Order, the Commission concluded that unlicensed low-power networks could be operated indoors without coordination but that in order for unlicensed standard power, outdoor networks to safely operate in licensed bands they would have to be coordinated with existing licensed stations.[3] As an Automatic Frequency Coordination ("AFC") system would

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[1] Trump, Donald J. "Executive Order 13849: Authorizing the Implementation of Certain Sanctions Set Forth in the Countering America's Adversaries Through Sanctions Act." Federal Register, October 25, 2018.
[2] Unlicensed Use of the 6 GHz Band, ET Docket No. 18-295, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3852 (2020) (6 GHz Report and Order).
[3] Ibid.

need to be invented, the Commission encouraged the formation of an industry led multi-stakeholder group ("MSG") to invent an AFC system. Finally, in February of 2024 the FCC's Office of Engineering and Technology ("OET") announced that it had approved seven applications for AFC systems to operate in the 6 GHz band finally opening the door for standard power outdoor networks to provide service to unserved and underserved consumers who had been waiting for more than 4 years to use the promised benefits of the 6 GHz band.[4]

III. WIRELESS INDUSTRY CONTINUES TO FACE ONGOING CHALLENGES IN MEETING INCREASING CONSUMER DEMANDS

Any sustainable national spectrum policy must continue to evolve, but there is still more work to be done. ECC supports the Commission's efforts under Chairman Carr's leadership to address the ongoing challenges – both immediate and future – that the wireless industry continues to face in the ongoing spectrum races, as innovations and advancements continue to put increasing demands on the finite national resource of spectrum.[5]

ECC therefore applauds the Chairman's leadership in initiating this proceeding at this time as it correctly recognizes that the FCC must not let regulatory red tape get in the way of continued innovation and progress on the spectrum front. Failure to do so will only result in America and Americans getting left behind in our increasingly connected global digital world. Specifically, ECC believes that the FCC can take immediate and simple steps to remove regulatory barriers to deployment to handle the growing amount of internet and wireless traffic that demand spectrum free from interference.

IV. THE COMMISSION SHOULD DIRECT THE WIRELESS BUREAU TO ISSUE A PUBLIC NOTICE ANNOUNCING: THE COMMISION'S UNIVERSAL LICENSING SYSTEM WILL NOW ACCEPTAPPLICATIONS FOR STANDARD POWER ACCESS POINT NODES IN PORTIONS OF THE 6 GHZ BAND

There is a simple and immediate solution that the Commission can take to remove regulatory barriers to broadband deployment and deliver immediate public interest benefits. Currently, in the 6 GHz band, where there is inefficient use of the spectrum by operating Standard Power Access Points ("SPAPs"), in spectrum with interference ("dirty air") from other SPAPs degrading the equipment performance. This can be easily remedied by allowing those who want reliable broadband at the highest speeds to register their SPAPs on the Commission's Universal Licensing System ("ULS") database (see "Exhibit A") to achieve guaranteed interference free spectrum[6] ("clean air"), making it possible to operate at the equipment's highest modulation state -- highest spectrum efficiency (see "Exhibit A"). This simple clarification removes unnecessary and burdensome regulatory underbrush and does not even necessitate a rule change

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[4] Federal Communications Commission, "FCC Approves Wi-Fi Management Systems to Operate in 6 GHz Band," news release, February 23, 2024, https://www.fcc.gov/document/fcc-approves-wi-fi-management-systems-operate-6-ghz-band.

[5] *See, e.g.,* Brendan Carr, Testimony before the Subcommittee on Communications and Technology, Committee on Energy and Commerce, U.S. House of Representatives, "The Fiscal Year 2025 Federal Communications Commission Agency Budget," July 9, 2024, https://www.congress.gov/event/118th-congress/house-event/117505.

[6] An interference level no greater than 6 dB below the thermal noise of equipment registered on the ULS data base.

V. IT IS CLEARLY IN THE NATIONAL AND PUBLIC INTEREST TO REGISTER STANDARD POWER ACCESS POINT NODES ON THE ULS DATABASE

Registering Standard Power Access Point Nodes (SPANs) on the ULS database is clearly in the public interest as consumer demands on our finite national resource of spectrum are only certain to increase and because of the immediate benefits this action will afford. First, spectrum is a finite national resource, and it is critical for economic development and national security reasons that it be used in the most efficient manner possible. Registering SPAN's on the ULS data base would increase spectrum efficiency by allowing SPANs to operate in 6 GHz spectrum with no interference – or in "clean air", thereby supporting 1024 QAM and beyond. If forced to operate in "dirty air," or subject to interference, spectrum efficiency is reduced. Specifically, with dirty air, SPANs performance could be reduced to 1 bps/Hz or even 0 bps/Hz.

This simple action is clearly in the public interest because it would achieve The Triple Crown in Spectrum Regulation: (1) The ability to safely support licensed PTP, (2) unlicensed PTMP and (3) hybrid (licensed nodes with unlicensed clients operating in "clean air") in the same (6 GHz) regulated frequency band.

Finally, registering SPANs on the ULS database would provide the opportunity for innovation without regulatory roadblocks, demonstrating the FCC's worldwide leadership in spectrum usage by unleashing innovation in the 6 GHz regulated frequency bands.

VI. CONCLUSION

The simple action requested in Section IV, is clearly in the national and public interest as it results in the following benefits:

- Wirelessly achieving nationwide reliable, gigabit-speeds with fiber reliability;
- Nationwide broadband deployment in a fraction of the time and at a fraction of the cost of fiber;
- No taxpayer dollars required or government subsidies required;
- No interference issues;
- The Triple Crown in Spectrum Regulation: (1) The ability to safely support licensed PTP, (2) unlicensed PTMP and (3) hybrid (licensed nodes with unlicensed clients operating in "clean air") in the same (6 GHz) regulated frequency band; and
- Provides the opportunity for innovation without regulatory roadblocks, demonstrating the FCC's worldwide leadership in spectrum usage by unleashing innovation in regulated frequency bands.

Respectfully submitted,

/s/ Michael Mulcay

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